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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/766,654
Filing Date: January 27, 2004
Appellant(s): AHLUWALIA ET AL.

John D. Murnane
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed May 19, 2009, appealing from the Office action mailed November 25, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

10/766652

10/766649

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

A substantially correct copy of appealed claim 1 appears on page 18 of the Appendix to the appellant's brief. The minor errors are as follows: in line 1, the word "comprising" should be deleted.

(8) Evidence Relied Upon

5,965,257	AHLUWALIA et al.	10-1999
4,600,634	LANGER	7-1986
4,994,317	DUGAN et al.	2-1991
6,228,497	DOMBECK	5-2001
GB 2167060	WEAVER et al.	5-1986

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahluwalia (US 5,965,257) in view of Langer (US 4,600,634) and GB 2167060 (GB '060) or Dugan (US 4,994,317) or Dombeck (US 6,228,497). Ahluwalia disclose a structural article used in a wide variety of products including fire walls, vapor barriers, roofing underlayment, and facing sheets (col 3, ln 34-42). The articles comprise a substrate having an ionic charge which is coated with a coating having essentially the same ionic charge. The coating consists of a filler material and a binder material. The binder comprises an acrylic latex, specifically Hycar 2679 (col 3, ln 5-9). It should be noted that Hycar 2679 polymer emulsion contains synthetic soap, sometimes known as surface active agents or surfactants (col 7, ln 16-19), thus meeting Applicant's limitation of a surfactant

component. Furthermore, because a surfactant is present in Ahluwalia's composition, surfactant-generated microcells would also be present in the material. The substrate is preferably fiberglass and the filler is selected from fly ash, charged calcium carbonate, and ceramic microspheres. The binder is preferably acrylic latex (abstract) or SBR latex (col 3, ln 11-12). Ahluwalia further discloses that it is well known to include clay as a filler material in structural articles in the building industry (col 1, ln 12-26). The articles are planar in shape and the substrate is coated on one side or both sides depending on the intended application (col 3, ln 42-44). The structural material may be coated on one or both sides with a water repellent material, an algaecide, an antifungal material, an antibacterial material, a surface friction agent, a flame retardant material, and a coloring dye (col 3, ln 54-67 to col 4, ln 1-3). The structural article contains 10-25% by weight glass fibers (claim 13) and the coating comprises nearly 85% by weight of the article (col 3, ln 17-18). Ahluwalia discloses the claimed invention except for the teaching that a metallic component is adhered to the first layer and the specific teaching that clay is added to the coating.

Langer (US 4,600,634) discloses flexible fibrous endothermic sheet materials for fire protection. The flexible sheet is made of fiberglass and acrylic binder and is useful in building construction (abstract). Fillers useful in the composition include alumina trihydrate (col 3, ln 59). A backing, comprising an aluminum foil, is added to the backing of the sheet material to give an added degree of strength to the sheet material (col 4, ln 8-10). It would have been obvious to one having ordinary skill in the art to have added Langer's aluminum sheet to one or both sides of the coated substrate of Ahluwalia, motivated by the desire to create a structural article with increased strength and durability.

GB 2167060 discloses a fire resistant material comprising glass wool fibers and one or more selected clays (abstract). The clays are selected to provide an endothermic reaction in the fire resistant material (page 2, ln 5-11). Dugan et al. (US 4,994,317) disclose a fabric suitable for use as a flame barrier fabric comprising a flame durable textile fabric (abstract). The fabric comprises inorganic yarns such as glass (col 2, ln 37). To provide enhanced resistant to flame and heat, hydrated clay may be incorporated in a silicone layer (col 3, in 58-61). Dombeck (US 6,228,497) disclose a high temperature resistant glass fiber composition comprising glass fibers and a latex binder (abstract). Clay fillers are frequently added to inorganic fiber products to improve their fire resistance (col 1, ln 19-21 and col 5, ln 4-7). It would have been obvious to one having ordinary skill in the art to have added the clay filler taught by GB 2167060 or Dugan et al. or Dombeck to the composite of Ahluwalia and Langer, motivated by the desire to create a substrate that has increased flame resistance.

(10) Response to Argument

Appellant argues that the Examiner has not given appropriate consideration to the "consisting essentially of" transitional phrase. This argument is not persuasive because although the combination of Ahluwalia and Langer includes additional layers that are not required by application's invention, it must be noted that the references do disclose the invention as claimed. The fact that it discloses additional structure not claimed is irrelevant. Furthermore, the claims do not necessarily preclude the use of a substrate, as presently written, i.e. "consisting essentially of" language. "Consisting essentially of" only excludes components that will affect the basic and novel characteristics of the invention and the burden is on Appellant to show that the additional

components do affect the basic and novel characteristics. MPEP 2111.03. It is the Examiner's opinion that the basic and novel characteristic of the present invention is not the strength of the composite material, as argued by Appellant, but the heat insulating and fire resistant properties of the material, as set forth in the preamble of the independent claims. Furthermore, the presence or absence of a substrate which is an alternative in Appellant's own invention (independent claims 1 and 2) gives further weight to the Examiner's position that the strength of the composite is not the basic and novel characteristic of the invention.

Appellant further argues that nothing in the cited references suggests adhering a metallic component to a composite material comprising a substrate having an ionic charge coated with a coating having essentially the same ionic charge, wherein the coating does not bleed through the substrate. Appellant further argues that nothing in any of the cited references suggest the inclusion of clay among filler components to produce a coating that does not bleed through a substrate that has essentially the same ionic charge as the substrate. These arguments are not persuasive because Appellant cannot show non-obviousness by attacking references individually where, as here, the rejections are based on a combination of references. *In re Keller*, 208 USPQ 871 (CCPA 1971). References are evaluated by what they suggest to one versed in the art. The test for obviousness is not whether the features of the reference may be bodily incorporated into the other to produce the claimed subject matter, but simply what the references make obvious to one having ordinary skill in the pertinent art. *In re Bozek,* 163 USPQ 545 (CCPA 1969). The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin,* 170 USPQ 209 (CCPA 1971). In this case, the

Ahluwalia reference discloses the claimed invention except for the teaching that a metallic component is adhered to the coated substrate on one or both sides of the substrate and that the metallic component is from 5-10% by weight of said composite material and the specific teaching that clay is added to the coating. It should be noted that the Examiner is not relying on the Ahluwalia reference for its use of a clay filler. Langer discloses an aluminum foil backing that is added to the backing of the sheet material to give an added degree of strength to the sheet material. GB '060, Dugan, and Dombeck were cited for their inclusion of clay filler in their fire resistant compositions. Therefore, the combination of disclosures taken as a whole properly rejects the presently claimed invention.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer. In their Appeal Brief, Appellant has incorrectly labeled 10/354220. As of yet, no Board Decision has been set forth in 10/354220. This application was remanded back to the Examiner and is currently going through prosecution.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Ula C Ruddock/

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